

Work Order ID 62266

September 24, 2010 8:10:52 AM



Page 1

Item ID: D3936-5

Accept



Setup Start



Revision ID:

Stop



Item Name: Divider

Start Date: 9/24/10 Start Qty: 5.00



Required Date: 10/01/10 Req'd Qty: 5.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.
Code Qty Qty Number Stamp

Draw Nbr

Revision Nbr

D3936

A

100

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

6061 . 040

1-Cut as per Dwg D3936

Dwg Rev: A

Prog Rev: 1

grain direction per dwg

2-Deburr if necessary

B10-9-07

(6)

(P10)

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

B10-9-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3936-5 PAR #: _____ Fault Category: Small FGS AO-Int NCR: Yes No DQA: ✓ Date: 10/10/01
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: ✓ Date: 10/10/01

NCR: <u>62266</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/12/27	#100	Found Qty x2 Parb with lead in/lead out in some of the 0.098" hole. (1 part with Qty 1 hole, 1 to 2nd with 2 holes)	<u>Q5142</u>	→ Scrap + Destroy Qty 2 Mk <u>113004</u> x2	<u>HB</u> <u>10-9-02</u>	<u>S</u> <u>10/12/27</u>	<u>Q5142</u>	<u>S</u> <u>10/12/27</u>
		R.C. Dwell. machine moving out of hole location with presor still in the line R.C. machine malfunction.	<u>Q5142</u>					<u>S</u> <u>10/12/27</u>

NOTE: Date & initial all entries

Work Order ID 62266

September 24, 2010 8:10:52 AM



Page 2

Item ID: D3936-5

Accept



Setup Start



Revision ID:

Stop



Item Name: Divider

Start Date: 9/24/10 Start Qty: 5.00



Cust Item ID:

Required Date: 10/01/10 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120



QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

8/10/09/28

6

130



Brake NC

Brake NC

Memo

Bend as per Dwg

0.00

0.00

SB 10/09/28

6

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8/10/09/28

6

Pro →

Dart Aerospace Ltd

W/O: 62266		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10/9/28	#100	Per. Chang ADD steps to Alodine + QC3 as per Day.	AD	10.10.01			S 10/09/24	
10/09/28	#141	Alodine (chemical coat) as per Q57 005	KR	10-9-30	⑥		S 10/09/28	
10/09/28	#142	QC3 inspect chemical coat per Q57 005	JH	10-9-30	✓6		S 10/09/28	

Part No: D3936-5 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62266

September 24, 2010 8:10:53 AM

Page 3

Item ID: D3936-5

Accept

Revision ID:

Item Name: Divider

Start Date: 9/24/10 Start Qty: 5.00

Required Date: 10/01/10 Req'd Qty: 5.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

Identify as per dwg & Stock Location: 180

0.00



Packaging

Memo

0.00

Packaging

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/19/30 (6)

10/10/01
MF
10-9-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

September 24, 2010 8:10:52 AM

Work Order ID: 62266

Parent Item: D3936-5

Parent Item Name: Divider



Start Date: 9/24/10

Required Date: 10/01/10

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased	No			100	sf	73.9300	0.91	4.789474	5.5		
6061-T6 .040 Sheet													

Location

Loc Qty

Loc Code

MAT21

73.93

111224

2

113004

71.93

113004

1310-4-27

⑥

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 62266
Description: Divider		Part Number: D3936-5
Inspection Dwg: D3936 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

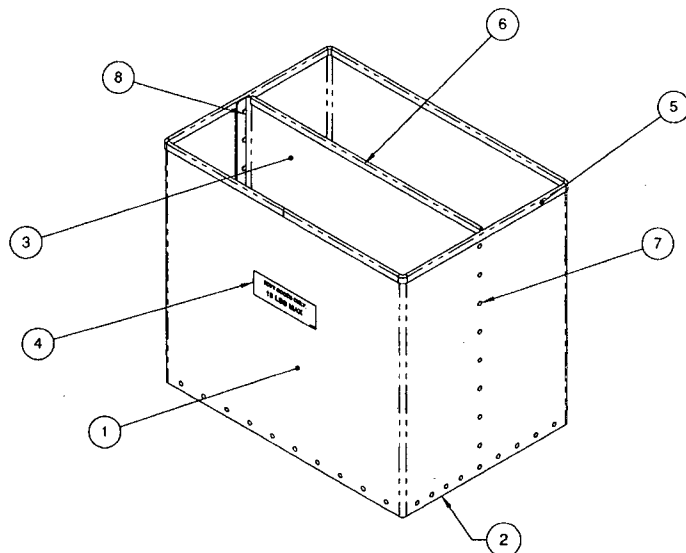
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	.100	✓		V IB 02	
10.598	+/-0.010	10.600	✓		T IB 01	
1.178	+/-0.010	1.178	✓		V	
12.075	+/-0.010	12.075	✓		T	
11.662	+/-0.010	11.653	✓		T	
0.725	+/-0.010	.715	✓		V	
0.300	+/-0.010	.303	✓		V	
1.298	+/-0.010	1.302	✓		V	
1.698	+/-0.010	1.695	✓		V	
8.400	+/-0.010	8.400	✓		V PRO 02 IB	
1.200	+/-0.010	1.200	✓		V	
12.375	+/-0.010	12.375	✓		V PRO 02 IB	
0.040	+/-0.010	.039	✓		V	

Measured by: B	Audited by: J	Prototype Approval:	N/A
Date: 10-9-07	Date: 10/10/08	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.10.22	New Issue	KJ	

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	1	D3936-1	SIDES
2	1	D3936-3	BOTTOM
3	1	D3936-5	DIVIDER
4	1	D3938-3	PLACARD
5	1	D3941-40	RUBBER CUSHION
6	1	D3941-12	RUBBER CUSHION
7	56	MS20426AD3-4	RIVET
8	8	MS20426AD3-5	RIVET



D3936-041 MAPBOX ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3936-041" AND B/N USING A WHITE FINE POINT PAINT MARKER
- 7) WEIGHT: 2.54 lbs

ASSEMBLY INSTRUCTIONS

1. BEND D3936-1/-3/-5 PARTS PER SHEETS 2-7.
2. POSITION D3936-5 DIVIDER IN PLACE INSIDE THE D3936-1 SIDES AND CLECO IN PLACE.
3. POSITION THE D3936-3 BOTTOM IN PLACE AGAINST THE D3936-5 DIVIDER AND INSIDE THE D3936-1 SIDES.
4. TRANSFER DRILL 10X $\phi 0.098$ (#40 DRILL) HOLES FROM THE D3936-3 BOTTOM TO THE D3936-5 DIVIDER. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
5. TRANSFER DRILL 38X $\phi 0.098$ HOLES FROM D3936-1 SIDES TO D3936-3 BOTTOM. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
6. REMOVE ALL CLECOS AND COUNTERSINK 64X EXTERIOR HOLES $\phi 0.179 \times 100$ ". DEBURR ALL HOLES IN ALL PARTS.
7. REASSEMBLE PARTS USING CLECOS IN EVERY THIRD HOLE TO MAINTAIN ALIGNMENT.
8. RIVET D3936-1 SIDE TO D3936-5 DIVIDER USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
9. RIVET D3936-5 DIVIDER TO D3936-3 BOTTOM USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
10. RIVET D3936-3 BOTTOM TO D3936-1 SIDE USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
11. POWDER COAT ASSEMBLY PER NOTE 2.
12. TEST FIT RUBBER CUSHION TO TOP EDGE OF MAPBOX. TRIM AS REQUIRED FOR PROPER FIT.
13. REMOVE RUBBER CUSHION.
14. APPLY SMALL BEAD OF SILICONE/ADHESIVE TO TOP EDGE OF MAPBOX.
15. SLIDE RUBBER CUSHION OVER EDGE AND PRESS INTO SILICONE/ADHESIVE.
16. WIPE OFF ANY EXCESS SILICONE/ADHESIVE BEFORE IT DRIES/CURES.
17. APPLY D3938-3 PLACARD AS SHOWN.
18. ALLOW SEALANT/ADHESIVE TO CURE/DRY 24 HRS BEFORE SHIPPING PART.

RELEASED
2009-08-28

A	NEW ISSUE		09.07.08	
REV.		DESCRIPTION	BY DATE	
DESIGN	DF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	DF			
CHECKED	AJS		DRAWING NO.	REV.
MFG. APPR.	BE		D3936	SHEET 1 OF
APPROVED	AD		TITLE	SCALE
DE APPR.	SH		MAPBOX	NT
DATE	09.07.08	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

Dart Aerospace Ltd

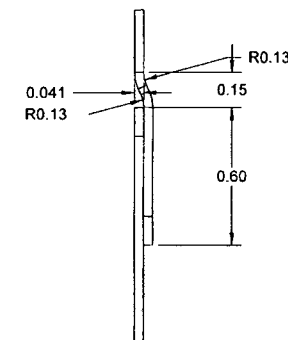
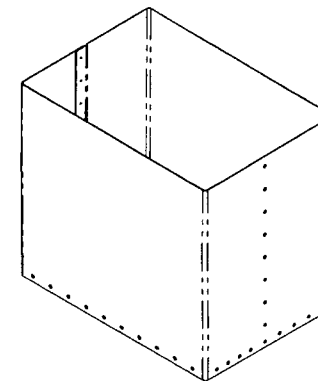
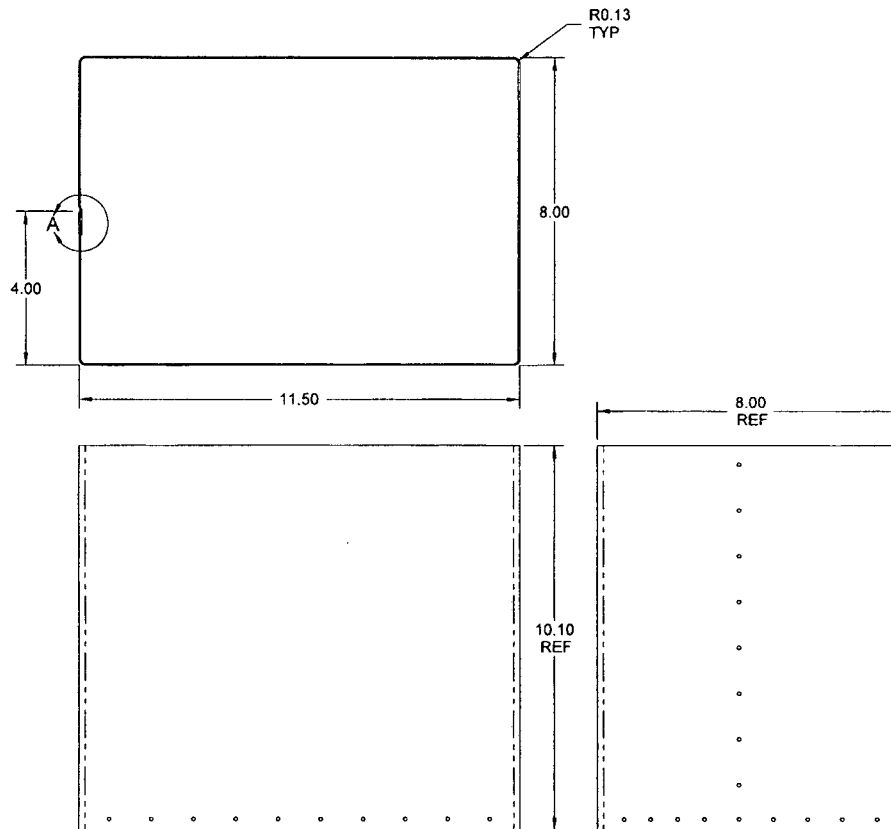
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DETAIL A
SCALE 5x

D3936-1 SIDES
MADE FROM D3936-1F

RELEASED
2009-08-28
MB

NOTES:

- 1) MATERIAL: MADE FROM D3936-1F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.54 lbs

DESIGN	1F	DART AEROSPACE LTD	
DRAWN	ALS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ALS	DRAWING NO. D3936	REV. A
MFG. APPR.	EP	SHEET 2 OF 7	
APPROVED	MB	TITLE MAPBOX	SCALE
DE APPR.	MB	NTS	
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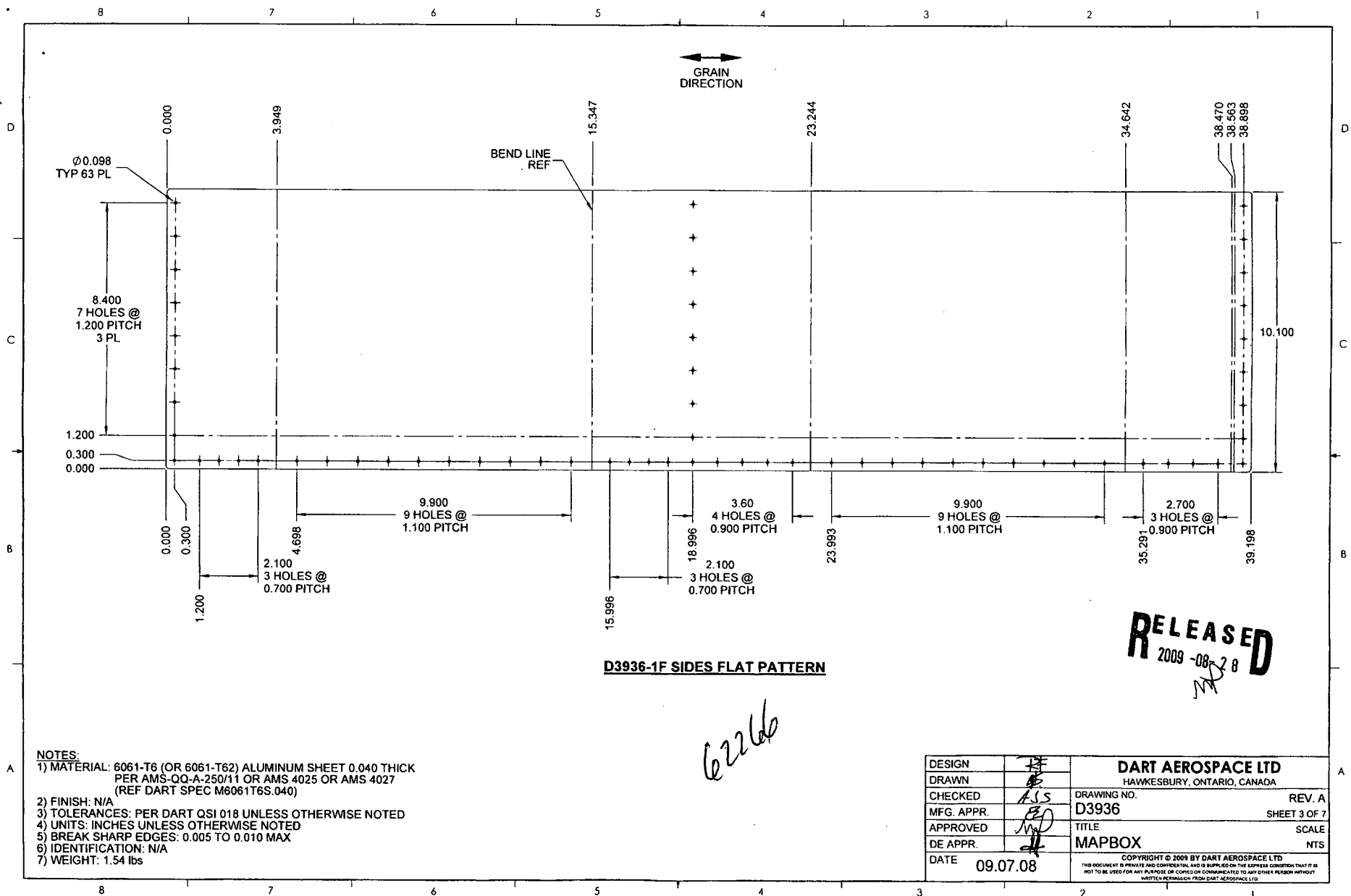
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

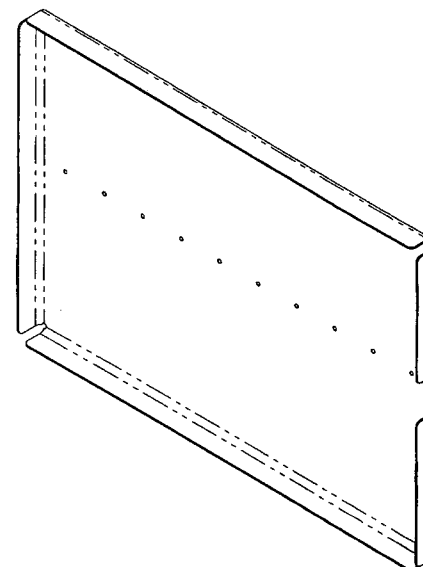
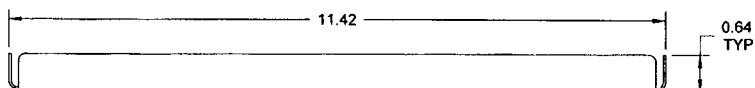
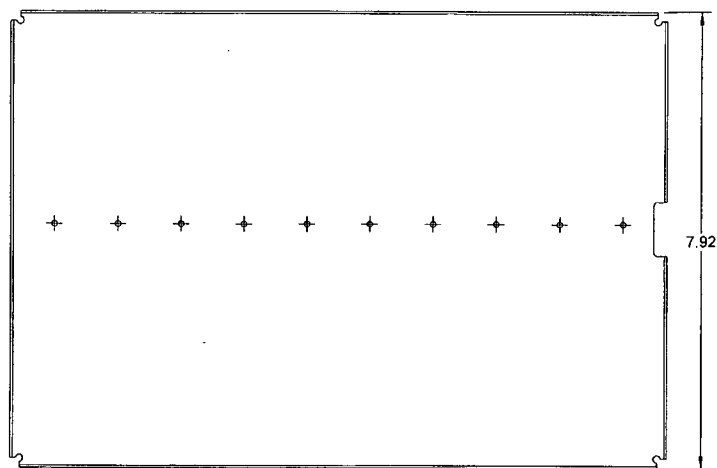
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries





D3936-3 BOTTOM
MADE FROM D3936-3F

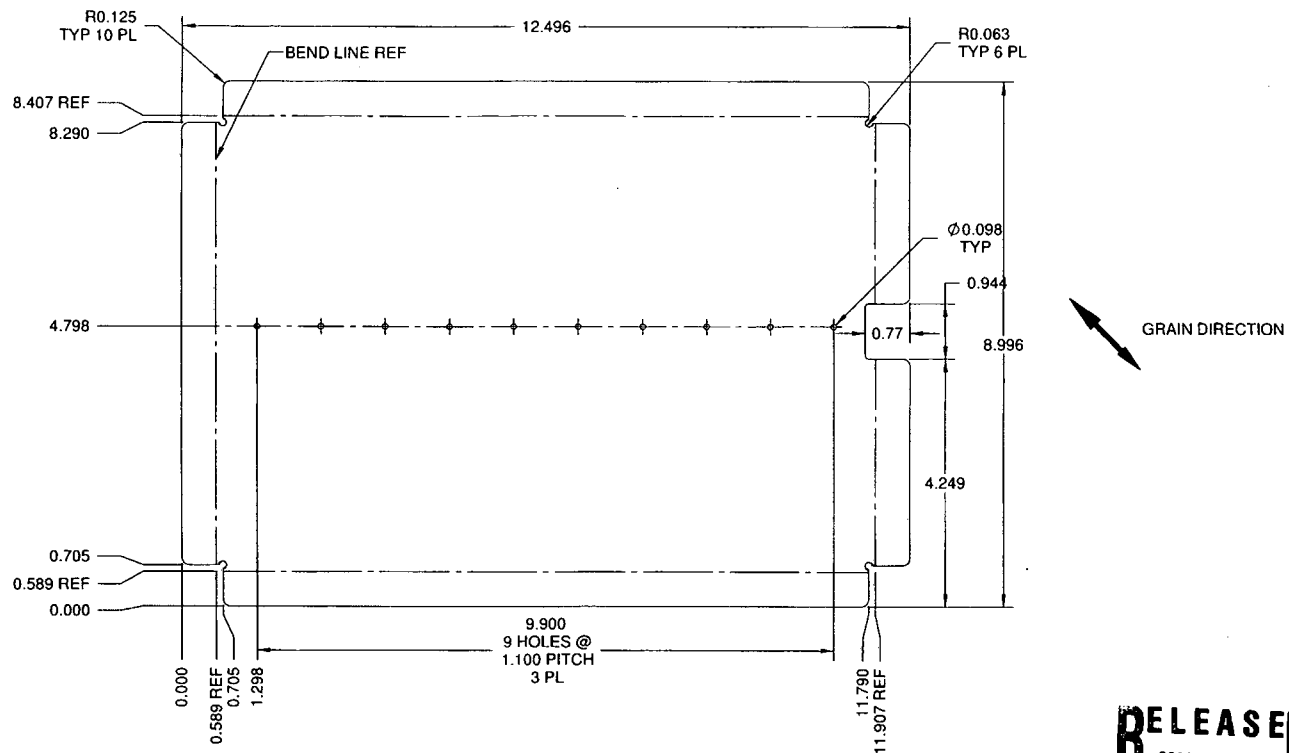
RELEASED
2008-08-28
M

62266

NOTES:

- 1) MATERIAL: MADE FROM D3936-3F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.43 lbs

DESIGN	73	DART AEROSPACE LTD	
DRAWN	AS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. A
MFG. APPR.	AS	D3936	SHEET 4 OF 7
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	MAPBOX	NTS
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D3936-3F BOTTOM FLAT PATTERN

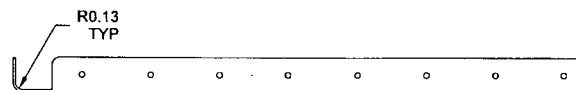
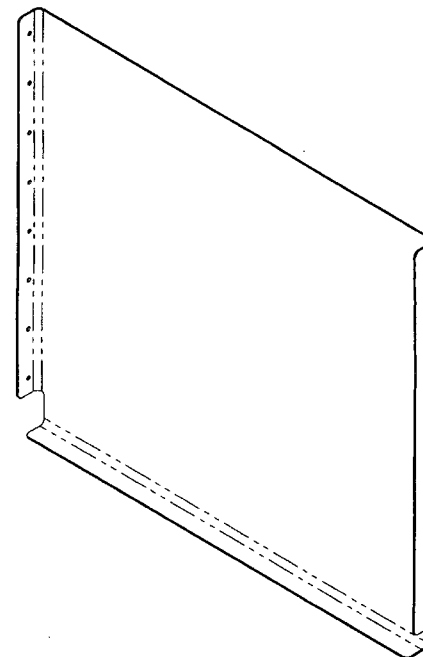
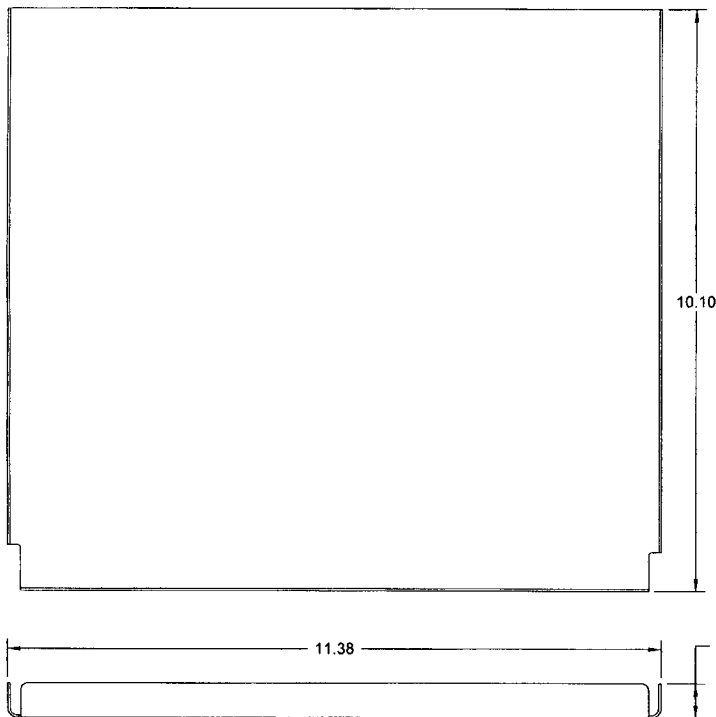
RELEASED
2009-08-28
NW

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF DART SPEC M6061T6S.040)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.43 lbs

62266

DESIGN	<i>13</i>	DART AEROSPACE LTD	
DRAWN	<i>AS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AS</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>ES</i>	D3936	SHEET 5 OF 7
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DE APPR.	<i>AS</i>	MAPBOX	NTS
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D3936-5 DIVIDER
MADE FROM D3936-5F

RELEASED
2009-08-28

62266

NOTES:

- 1) MATERIAL: MADE FROM D3936-5F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.50 lbs

DESIGN	<i>JS</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>JS</i>	DRAWING NO. D3936	REV. A
CHECKED	<i>JS</i>	SHEET 6 OF 7	
MFG. APPR.	<i>JS</i>	TITLE MAPBOX	SCALE NTS
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DATE	09.07.08		

R0.125
TYP 6 PLCS

BEND LINE REF

12.375

Ø0.098
TYP

8.400
7 HOLES @
1.200 PITCH
2 PL

10.598

GRAIN DIRECTION

9.30

1.698
1.298

0.549 REF
0.000

0.000
0.300
0.549 REF
0.725

10.932

0.52

1.178
TYP
R0.05
TYP 2 PLCS

9.42

11.662
11.826 REF
12.075

713

RELEASED
2009-08-28

D3936-SF DIVIDER FLAT PATTERN

62244

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF DART SPEC M6061T6S.040)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.50 lbs

DESIGN	<i>713</i>	DART AEROSPACE LTD	
DRAWN	<i>LS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>LS</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>LS</i>	D3936	SHEET 7 OF 7
APPROVED	<i>LS</i>	TITLE	SCALE
DE APPR.	<i>LS</i>	MAPBOX	NTS
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